

Amendments to the Claims

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently amended) A method for virtualizing access to native resources, the method comprising ~~the steps of~~:

~~(a)~~ receiving a request to access a native resource from a process executing within a context of an isolation environment including an application isolation layer and a user isolation layer, the request including a virtual name for the native resource;

~~(b)~~ determining that a rule action specifying ~~of~~ remap is associated with the virtual name included in the received request;

~~(c)~~ forming a literal name for the native resource, the literal name identifying a literal native resource of the same type as the requested resource; and

~~(d)~~ issuing to the operating system a request to access the native resource, the request including the determined literal name for the native resource.

2. (Currently amended) The method of claim 1 wherein receiving a request to access a native resource ~~step (a)~~ comprises: receiving a request from a process executing in the context of an isolation environment to access a named system object, the request including a virtual name for the system object.

3. (Currently amended) The method of claim 2 wherein forming a literal name ~~further step (c)~~ comprises:

~~(e-1)~~ determining a rule associated with the virtual name included in the received request; and

~~(e-2)~~ using the determined rule to form a literal name for the system object that identifies a literal system object.

4. (Currently amended) The method of claim 1 wherein receiving a request to access a native resource ~~step (a)~~ comprises: receiving a request from a process executing in the context of an isolation environment to access a file system element, the request including a virtual name for the file system element.

5. (Currently amended) The method of claim 4 wherein forming a literal name further ~~step (e)~~ comprises:

~~(e-1)~~ determining a rule associated with the virtual name included in the received request; and

~~(e-2)~~ using the determined rule to form a literal name for the file system element that identifies a literal file system element.

6. (Currently amended) The method of claim 1 wherein receiving a request to access a native resource ~~step (a)~~ comprises: receiving a request from a process executing in the context of an isolation environment to access a registry key, the request including a virtual name for the registry key.

7. (Currently amended) The method of claim 6 wherein forming a literal name further ~~step (e)~~ comprises:

~~(e-1)~~ determining a rule associated with the virtual name included in the received request; and

~~(e-2)~~ using the determined rule to form a literal name for the registry key that identifies a literal registry key.

8. (Currently amended) The method of claim 1 wherein receiving a request to access a native resource ~~step (a)~~ comprises: receiving a request from a process executing in the context of an isolation environment to access one of a window and a window class, the request including one of a virtual name for the window and a virtual name for the window class.

9. (Currently amended) The method of claim 8 wherein forming a literal name further ~~step (e)~~ comprises:

~~(e-1)~~ determining a rule associated with the virtual name included in the received request;
and

~~(e-2)~~ using the determined rule to form a literal name for the one of a virtual name for the window and a virtual name for the window class that identifies one of a literal window name and a literal window class.

10. (Currently amended) The method of claim 1 wherein forming a literal name ~~further step (e)~~ comprises:

~~(e-1)~~ accessing a rules engine to determine a rule associated with the virtual name received in the request; and

~~(e-2)~~ forming a literal name for the native resource responsive to the determined rule, the formed literal name identifying a literal native resource of the same type as the requested resource.

11. (Currently amended) The method of claim 1 further comprising: ~~the step of~~ receiving a handle from the operating system identifying the accessed object.

12. (Currently amended) The method of claim 11 further comprising: ~~the step of~~ transmitting the handle to the process.

13. (Currently amended) The method of claim 1 wherein forming a literal name ~~step (e)~~ further comprises: determining, by the remap rule, the literal name of the native resource for the virtual name of the native resource.

14. (Currently amended) A computer implemented apparatus provided by an operating system executing on a processor of a computer and virtualizing access to native resources, the apparatus comprising:

a hooking mechanism receiving a request to access a native resource from a process executing in the context of an isolation environment including an application isolation layer and a user isolation layer, the request including a virtual name for the native resource;

a rules engine storing a rule action associated with the virtual name included in the received request, the rule action specifying remap;

a name virtualization engine forming a literal name for the native resource, the formed literal name identifying a literal native resource of the same type as the requested resource; and
an interface of an operating system executing on a processor of a computer, the interface requesting access to the identified literal native resource.

15. (Original) The apparatus of claim 14 wherein the hooking mechanism intercepts a request to open a native resource.

16. (Original) The apparatus of claim 14 wherein the hooking mechanism intercepts a request to create a native resource.

17. (Cancelled).

18. (Currently amended) The apparatus of claim ~~14~~ ~~17~~ wherein the rules engine comprises a database.

19. (Currently amended) The apparatus of claim ~~14~~ ~~17~~ wherein the rule engine stores a rule action ~~comprises a rule~~ to determine the literal name of the native resource from the virtual name of the native resource.

20. (Original) The apparatus of claim 14 wherein the hooking mechanism comprises a file system filter driver.

21. (Original) The apparatus of claim 14 wherein the hooking mechanism comprises a mini-filter.

22. (Original) The apparatus of claim 14 wherein a native file system comprises the hooking mechanism.